AMENDMENTS TO THE CLAIMS

Please amend claim 5. Following is a complete listing of the claims pending in the application

1. (Original) A method comprising:
applying at least one set of test neural stimulation signals to a patient having a neurologic dysfunction;
acquiring at least one from the group of a set of coherence measurements and a set of silent period measurements; and
determining a set of therapeutic neural stimulation parameters directed toward affecting the patient's neurologic dysfunction.

2. (Original) The method of claim 1, wherein the set of therapeutic neural stimulation parameters comprises a first subset of neural stimulation parameters directed toward affecting a first patient symptom and a second subset of neural stimulation parameters directed toward affecting a second patient symptom.

3. (Original) The method of claim 1, further comprising positioning a set of electrodes with respect to a target neural population within the patient.

4. (Original) The method of claim 3, wherein at least one electrode within the set of electrodes is configured to deliver neural stimulation to a cortical region within the patient.

5. (Currently Amended) The method of claim ~~5~~4, wherein the cortical region corresponds to a neural population that facilitates a degree of control over at least one type of patient movement.

6. (Original) The method of claim 1, further comprising delivering cortical stimulation to the patient.

7. (Original) The method of claim 6, wherein delivering cortical stimulation occurs in a manner that increases a likelihood of facilitating or effectuating a lasting neurofunctional change that exhibits a persistent behavior in the absence of neural stimulation.

8. (Original) The method of claim 6, further comprising performing a behavioral therapy in conjunction with delivering cortical stimulation.

9. (Original) The method of claim 1, further comprising acquiring reference therapeutic state information.

10. (Original) The method of claim 9, wherein determining a set of therapeutic stimulation signals comprises evaluating reference therapeutic state information relative to at least one from the group of the set of coherence measurements and the set of silent period measurements.

11. (Original) A method comprising:

establishing a reference treatment state in a patient, the reference treatment state directed toward producing a reference symptomatic state, the reference treatment state established at least partly through delivery of neural stimulation to the patient in accordance with a first set of neural stimulation parameters;

acquiring reference patient state information corresponding to the reference treatment state, the reference patient state information comprising at least one from the group of a set of coherence measurements and a set of silent period measurements;

establishing a shifted symptomatic state in the patient;

acquiring shifted patient state information corresponding to the shifted symptomatic state, the shifted patient state information comprising at least one from the group of a set of coherence measurements and a set of silent period measurements;

evaluating the shifted patient state information relative to the reference patient state information; and

determining a second set of neural stimulation parameters directed toward accommodating the shifted symptomatic state.

12. (Original) The method of claim 11, wherein the second set of neural stimulation parameters comprises a first subset of neural stimulation parameters directed toward affecting a first patient symptom and a second subset of neural stimulation parameters directed toward affecting a second patient symptom.

13. (Original) The method of claim 11, wherein the shifted symptomatic state corresponds to a drug-related condition.

14. (Original) The method of claim 11, wherein the shifted symptomatic state corresponds to a drug-related half-life.

15. (Original) The method of claim 11, wherein the shifted symptomatic state corresponds to a patient activity.

16. (Original) The method of claim 11, wherein the shifted symptomatic state corresponds to a time of day.

17. (Original) The method of claim 11, further comprising positioning a set of electrodes with respect to a target neural population within the patient.

18. (Original) The method of claim 17, wherein at least one electrode within the set of electrodes is configured to deliver neural stimulation to a cortical region within the patient.

19. (Original) The method of claim 11, further comprising delivering cortical stimulation to the patient in accordance with the second set of neural stimulation parameters for a limited time period.

20. (Original) The method of claim 19, wherein the limited time period is greater than approximately 1 hour.

21. (Original) The method of claim 19, wherein delivering cortical stimulation to the patient in accordance with the second set of neural stimulation parameters occurs on a programmed basis.

22. (Original) The method of claim 19, wherein delivering cortical stimulation to the patient in accordance with the second set of neural stimulation parameters occurs in response to a signal communicated by a patient operated device.

23. (Original) The method of claim 19, further comprising delivering cortical stimulation to the patient in accordance with the first set of neural stimulation parameters after the limited time period.

24. (Original) The method of claim 11, further comprising communicating information corresponding to the second set of neural stimulation parameters to at least one from the group of a programming unit and an implantable pulse generator.

25. (Original) A method comprising:

treating a patient having a neurofunctional deficit in accordance with a treatment program comprising a neural stimulation procedure that corresponds to a first set of neural stimulation parameters;

acquiring at least one from the group of a reference set of coherence measurements and a reference set of silent period measurements;

interrupting a neural stimulation procedure; and

acquiring at least one from the group of a comparison set of coherence measurements and a comparison set of silent period measurements; and

determining whether evidence of a persistent change corresponding to the patient's neurofunctional deficit exists in the absence of neural stimulation.

26. (Original) The method of claim 25, wherein treating a patient occurs over a period of at least one week.

27. (Original) The method of claim 25, wherein treating a patient occurs over a period of at least one month.

28. (Original) The method of claim 25, wherein treating a patient occurs over a period of approximately one year.

29. (Original) The method of claim 25, wherein neural stimulation comprises cortical stimulation.

30. (Original) The method of claim 25, wherein the treatment program additionally comprises a drug-related procedure.

31. (Original) The method of claim 25, wherein the treatment program additionally comprises a behavioral therapy procedure.

32. (Original) The method of claim 25, wherein the treatment program comprises a behavioral therapy procedure in conjunction with a neural stimulation procedure.

33. (Original) The method of claim 25, wherein determining whether evidence that a persistent change exists comprises determining whether a change corresponding to the patient's neurofunctional deficit lasts for a duration of approximately one from the

group of several seconds, several minutes, one hour, several hours, one day, several days, one month, and several months.

34. (Original) The method of claim 25, wherein determining whether a persistent change exists comprises evaluating at least one from the group of the comparison set of coherence measurements and the comparison set of silent period measurements relative to at least one from the group of the reference set of coherence measurements and the reference set of silent period measurements.

35. (Original) The method of claim 25, wherein determining whether evidence of a persistent change exists comprises determining whether at least one from the group of the comparison set of coherence measurements and the comparison set of silent period measurements exhibits generally unchanging behavior for a minimum amount of time.

36. (Original) The method of claim 25, wherein determining whether evidence of a persistent change exists comprises determining whether at least one from the group of the comparison set of coherence measurements and the comparison set of silent period measurements exhibits a maximum allowable variation during a minimum allowable time interval.

37. (Original) The method of claim 25, further comprising interrupting a drug-related procedure.

38. (Original) The method of claim 25, further comprising determining a second set of neural stimulation parameters that facilitate accommodation of a persistent change in the patient's neurofunctional deficit.

39. (Original) The method of claim 25, further comprising adjusting a drug-related procedure to facilitate accommodation of a persistent change in the patient's neurofunctional deficit.

40. (Original) A method comprising:

treating a patient having a neurofunctional deficit in accordance with a treatment program comprising a cortical stimulation procedure corresponding to a first set of neural stimulation parameters;

interrupting cortical stimulation;

determining whether evidence of a persistent change corresponding to the patient's neurofunctional deficit exists in the absence of cortical stimulation; and

determining a second set of neural stimulation parameters that facilitate accommodation of a persistent change in the patient's neurofunctional deficit.